REMARKS

The comments of the applicant below are each preceded by related comments of the

examiner (in small, bold type).

Examiner 's Amendment
3. Cancel claims 5-13.
Claims 14-25 are pending. Claims 1-13 have been deleted.

The examiner's amendment is confirmed.

4. Restriction to one of the following inventions is required under 35 U.S.C.
121:
I. Claim 14, drawn to tables used by computer programs to identify
application menu entries that contain control button controls and the corresponding
control commands, classified in class 719, subclass 330 (Remote procedure call) or
class 717, subclass 143, 162 (Software development, linking).
II. Claims 15-25, drawn to speech recognition that converts utterances into
computer control signals, classified in class 704, subclass 275 (Speech controlled
systems).
Because these inventions are distinct for the reasons given above and have
acquired a separate status in the art as shown by their different classification,
restriction for examination purposes as indicated is proper.
5. The Examiner called on 13 July 2004 with the above restriction
requirement. During a telephone conversation with Mr. Feigenbaum on 14 July
2004 a provisional election was made without traverse to prosecute the invention of
Group II, claims 15-25. Affirmation of this election must be made by applicant in
replying to this Office action. Claim 14 is withdrawn from further consideration by
the examiner, 37 CFR 1. 1.142(b), as being drawn to a non-elected invention. The
applicant is referred also to a similar restriction requirement in parent application
08/450,776 (paper #7, mailed 2 January 1996).
6. The restriction requirement is made FINAL.
7. This application contains claim 14 drawn to an invention nonelected
without traverse in the reply noted above. A complete reply to the final rejection
must include cancelation of nonelected claims or other appropriate action (37 CFR
1.144) See MPEP § 821.01.

The applicant confirms the election of claims 15-25. Claim 14 has been canceled.

8. The drawings are objected to because it is unclear whether all of the
figures are necessary to support the claimed invention. It is possible that the lengthy
specification could be shortened if elements are unnecessary or could be considered
as prior art. Any changes thereto could cause some figures to be deleted as
appropriate.

Without conceding the examiner's position, figures 31-143 have been canceled. Those

figures are also present in the applicant's issued United States Patent 5,377,303, and are

incorporated by reference in this application.

> 9. The applicant(s) should check their filing receipts and/or the Patent
> Application Information Retrieval (PAIR) system for the acknowledgment of their
> domestic priority or benefit claims (if any) under 35 USC 119(e), 120 or 121 (37
> CFR 1.78).
> The application is identified as a continuation in the cover letter of 9 May
> 2001. While the corrected filing receipt appears to have the proper continuing
> information, this information has not been entered in the beginning of the
> specification as required by 35 USC 120. The specification papers have been
> reviewed and an amendment entering this material could not be found. However,
> the fact that the applicant requested a corrected filing receipt on 29 November 2001
> with the continuing data indicates that the inclusion of this data was intended and it
> is possible that a paper with such an amendment or an Application Data Sheet may
> have been misplaced since OIPE did originally enter most of the continuing data
> requested on the original filing receipt.

Amendments have been made. Under MPEP § 201.11(III)(D), no petition under 37

C.F.R. § 1.78 is required because the filing receipt contains the correct continuing information.

> 10.   The disclosure is objected to because of the following informalities:
>
> This application contains a computer program listing (marked APPENDIX
> C) of more than three hundred (300) lines. In accordance with 37 CFR 1.96(c), a
> computer program listing contained on more than three hundred (300) lines, <u>must</u>
> be submitted as a computer program listing appendix on compact disc conforming
> to the standards set forth in 37 CFR 1.96(c)(2) and must be appropriately
> referenced in the specification (see 37 CFR 1.77(b)(4)). Accordingly, applicant is
> required to cancel the current computer program listing, file a computer program
> listing appendix on compact disc in compliance with 37 CFR 1.9(c), and insert an
> appropriate reference to the newly added computer program listing appendix on
> compact disc at the beginning of the specification.

A CD-ROM containing Appendix C in PDF format is enclosed and incorporated by

reference. The applicant respectfully requests that the examiner accept this format because the

applicant is believed to no longer be in possession of an ASCII-format version of Appendix C.

> The 657 pages that follow page 48 appear to be copied from a document
> titled "Voice Navigator™ Developer 's Reference Manual " It appears that some

references to figures were added to these pages but the pages themselves do not conform to the standards required for a US patent application.

Content of Specification (-select portions-)

(d)   **Incorporation-By-Reference Of Material Submitted On a Compact Disc:** The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings " (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix ": See MPEP § 608.05(a). "Microfiche Appendices " were accepted by the Office until March 1,2001.

(h)   **Detailed Description of the Invention:** See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

The applicant has canceled appendices D and E, and has incorporated the contents of those appendices by reference to a related United States patent.

The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

A substitute specification is being provided.

12. Claims 15-25 are rejected under 35 U. S. C. § 103 as being unpatentable over Goldhor (5,231,670) in view of McKiel (5,133,011).
As per claims 15, 18,22 and 23 Goldhor teaches "a voice user interface " (see abstract):
"recognizing a voiced utterance and for providing corresponding signals as input to said computer " (his recognition of simple spoken words as well as spoken commands, abstract, lines 11-17 and figure 1, item 18);

> "converting said voiced utterance into a command string including a command simulating a mouse function " (suggested by his abstract noted above; his translation may also be any other legal input into a particular application, col. 4, lines 10-1 1; and other input events include typed input, input from pointing devices such as a mouse. etc, col. 6, lines 46-48 which suggests that it is well known to recognize speech as commands that mimic keyboard and mouse inputs, which inherently includes moving a pointer on a graphical user interface).
>
> It is noted that Goldhor does not explicitly teach "simulating a mouse function " However, he teaches that it is well know to combine speech recognition with common keyboard and mouse inputs as noted above. McKiel teaches details for linear vocal control of cursor position within a computer display with his Graphic User Interface (col. 1 and Figure 1). It would have been obvious for a person having ordinary skill in the pertinent art, at the time the invention was made, to manipulate the movement of the cursor using vocal commands as taught by McKiel in the system of Goldhor, because this would enable a person who is not physically able to move the mouse to be able to move the cursor via vocal commands.

This application has an effective filing date of June 23, 1989. McKiel has an earliest effective filing date of December 26, 1990. McKeil is not, therefore, prior, and cannot be used to establish alleged obviousness of the applicant's claims.

Independent claim 22 requires "converting a voiced utterance into control signals which will cause movement of the indicator in a desired direction." As the examiner acknowledged, this element is not disclosed by Goldhor.

Independent claim 23 has been amended to require means for converting a voiced utterance into a command string including a command simulating a mouse function in a graphical user interface. This element, as the examiner acknowledged, is not disclosed by Goldhor.

> Claim 17: See claim 15 above. Converting based on a "state of said program " is taught by Goldhor in col. 1, lines 55-60 and col. 8, lines 24-27 where he discusses controlling the recognizer state and application state.

Claim 17 has been amended. Although Goldhor discloses a system that maintains information about the state of the application, the state information, in Goldhor, is used "to reset

the application to its state at the time the input event occurred." (col. 8, lines 28-29). Goldhor

does not disclose or suggest converting a voiced utterance to an output string based on an

evaluation of a state of a subsystem; indeed, in Goldhor, the use of the application state is merely

saved and restored, and does not affect the voice recognition. Claim 17 is amended to clarify that

the conversion *varies* based on the state of the subsystem.

Claim 18 has also been amended.

> **Claim 19: A number of text "arguments " are shown for generating commands that require more than one word in figures 5-9 and 11.**
> **Claims 20, 21: See claim 15 above. Substituting voice inputs for text inherently affects the operating system that relies upon inputs to determine what the user is doing and how to react. The teachings of McKiel, for example, for controlling the cursor position would be capable of selecting anything that may be displayed on a graphical user interface (column 1). The teachings of Goldhor teach that it is well known to use speech to substitute or mimic text (keyboard) input thus rendering it obvious to use either or both (see col. 2, lines 40-61) as input events (col. 6, lines 26-37 and 44-49).**

Claims 19, 20, and 21 are dependent on claim 15 and contain all of that claim's

limitations.

> **Claims 24, 25: See claim 15 above. A set of representations that allow "mapping from a member of said set of internal representations to a member of said set of output strings" is taught by Goldhor, for one-to-one mapping used by said converter (col. 5, lines 3-5 and lines 61-66). Permitting multiple recognizer representations to be mapped to a single command (multiple-to-one) is taught in col. 1, lines 27-34 and col. 6, lines 18-26.**

Independent claim 24 requires a set of output strings produced by the voice recognizer

and the converter, and a mapping from a member of the set of internal representations to a

member of the set of output strings, the mapping being multiple-to-one. The examiner apparently

associates Goldhor's "recognition candidates" with the claimed internal representations, and

Goldhor's "translations" with the claimed output strings. Although Goldhor discloses creating a

candidate set that includes all of the recognition candidates (col. 1, lines 27-28), Goldhor does

not teach or suggest that multiple recognition candidates can map to one translation. Instead, in

Goldhor, a single "best match" recognition candidate is chosen, and the single translation

matching that candidate is input to the application program. (col. 1, lines 41-46). In the claimed

invention, however, a multiple-to-one mapping exists between members of the set of internal

representations and members of the set of output strings.

Claim 25 depends on claim 15 and contains each of its limitations.

All of the dependent claims are patentable for at least the reasons for which the claims on

which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the

examiner does not mean that the applicant concedes other comments of the examiner, (b) made

arguments for the patentability of some claims does not mean that there are not other good

reasons for patentability of those claims and other claims, or (c) amended a claim does not mean

that the applicant concedes any of the examiner's positions with respect to that claim or other
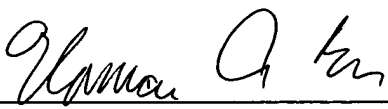
claims.

Enclosed is a $110 check for the Petition for Extension of Time fee. Please apply any

other charges or credits to deposit account 06-1050, reference 10591-003009.

Respectfully submitted,

Date: 12/3/04

Thomas A. Brown
Reg. No. 54,619

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

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